

**Invitation for Public Comment on the List of Candidates for the  
EPA Science Advisory Board (SAB)  
Draft Oil Spill Research Strategy Review**

**December 1, 2010**

The US Environmental Protection Agency (EPA) Office of Research and Development requested the Science Advisory Board (SAB) to form an SAB panel to peer review the Agency's Draft Oil Spill Research Strategy. The strategy discusses EPA's proposed research and collaborative approaches for four activities: dispersants, alternative remediation technologies, coastal restoration, and human health effects identified during the Gulf of Mexico oil spill.

The SAB Staff Office announced in a *Federal Register* Notice (Volume 75, Number 206, Pages 65627-65629) published on October 26, 2010 that it was forming the SAB Oil Spill Research Review Panel to provide independent advice on the Draft Oil Spill Research Strategy's activities and if the key research issues are included in the strategy. To form the panel, the EPA SAB Staff Office sought public nominations of nationally recognized and qualified experts in one or more of the following areas, particularly with respect to oil spill remediation and the implementation of environmental restoration programs; chemistry, fate, transport and exposure assessment, public health, toxicology, ecotoxicology risk assessment, restoration ecology, environmental engineering, and environmental monitoring.

The SAB Staff Office previously requested nominations of experts to serve on potential workgroups or panels to advise the Agency on scientific and technical issues related to the Gulf of Mexico oil spill in two *Federal Register* Notices (Volume 75, Number 96, Pages 28009 and Volume 75, Number 110, Pages 32769-32770) published on May 19, 2010 and June 9, 2010 respectively. The SAB Staff Office contacted all the experts who expressed an interest from these two notices and invited their nomination to serve on the panel to review the Draft Oil Spill Research Strategy.

The SAB Staff Office identified 64 candidates based on their relevant expertise and willingness to serve from the three *Federal Register* Notices. A list and biosketches for these candidates is provided below.

The SAB Staff Office Director will make the final decision about who will serve on the Panel based on all relevant information. This will include a review of the confidential financial disclosure form (EPA Form 3110-48), relevant information gathered by staff, and public comments. For the EPA SAB Staff Office, a balanced Panel is characterized by inclusion of candidates who possess the necessary domains of knowledge, the relevant scientific perspectives (which, among other factors, can be influenced by work history and affiliation), and the collective breadth of experience to adequately address the general charge. Specific criteria to be used in evaluating a candidate include: a) scientific and/or technical expertise, knowledge, and experience; b) availability and willingness to serve; c) absence of financial conflicts of interest; d) absence of appearance of a lack of impartiality; e) skills working in advisory committees and panels; and f) for the panel as a whole, diversity of scientific expertise and viewpoints.

**We hereby invite comments on the attached List of Candidates for consideration by the SAB Staff Office in the formation of this Panel. Comments should be submitted to Mr. Thomas Carpenter, Designated Federal Officer, no later than December 23, 2010. E-mailing comments to Mr. Carpenter at [carpenter.thomas@epa.gov](mailto:carpenter.thomas@epa.gov) is the preferred mode of receipt.**

## Oil Spill Research Strategy Review Candidates

### Addassi, Yvonne

#### California Department of Fish and Game

Ms. Yvonne Addassi is currently a Senior Environmental Scientist at the California Department of Fish and Game, Office of Spill Prevention and Response where she supervises a staff of scientists responsible for first response to oil spills. Prior to this position, Ms. Addassi served 15 years as the States' technical experts in the evaluation and use of alternative response technologies, including dispersants, in-situ burning, and bioremediation agents. Ms. Addassi co-chaired the Science and Technology Committee for Regional Response Team-9 (Arizona, California, and Nevada) of the Interagency National Response Team as well as served as the States Representative to the RRT. Ms. Addassi coordinated the statewide evaluation of oil spill cleanup agents, development of policies and approval frameworks for the use of dispersants and in-situ burning in waters off the state of California. Ms. Addassi holds a B.S. Biological Sciences from University of California Davis and an M.S. in Ecology and Environmental Policy, University of California Davis. She has served on several national committees including; a member on the National Academy of Sciences Committee on Understanding Oil Spill Dispersants: Efficacy and Effects; member of the Scientific Advisory Board for the University of New Hampshire's Coast Response and Research Center; Advisory Board member for the California Oiled Wildlife Care Network.

### Allen, Dan

#### Independent Consultant

After completing college studies at Auburn University and the University of Georgia in biology/ecology Mr. Allen spent four years as an environmental consultant with a firm based in Gainesville, FL. There, he worked with multidisciplinary teams of engineers and scientists on projects assessing impacts and mitigation measures for a wide range of projects. Work there included a great deal of field, lab and desk work. Relevant projects included water quality and pollutant mass loading studies, bioaccumulation studies, and habitat restoration and creation. Moving on to a 27-year career with Chevron Corporation he continued with studies of impacts from various oil and gas activities, many of which related to oil spill response, restoration, and technology development. He gained a great deal of experience using various techniques to measure oil impacts on invertebrate and vertebrate populations, monitor oil removal via biological and physical degradation and natural and chemically-accelerated dispersion. In the late 1990's he led an international effort by government agencies and industry partners to predict the behavior of a well blowout in deep water and develop response techniques suitable for such events. The project led to development of a lab and field-calibrated computer model (CDOG) which predicts both near and far-field plume dynamics, including partitioning of oil and gas components, hydrate formation, and plume dispersion. Many of the issues deduced from modeling results in fact presented themselves as realities during the Deepwater Horizon blowout in 2010. Control techniques employed during that spill were derived in large part from the Deep Spill studies.

### Allen, David T.

#### University of Texas

Dr. David T. Allen is the Gertz Regents Professor of Chemical Engineering and the Director of the Center for Energy and Environmental Resources, at the University of Texas at Austin. He holds a B.S. in Chemical Engineering from Cornell University (1979), and an M.S. (1981) and Ph.D. (1983) in Chemical Engineering from California Institute of Technology. Dr. Allen is the author of six books and over 190 papers in areas ranging from coal liquefaction and heavy oil chemistry to the chemistry of urban atmospheres. For the past decade, his work has focused primarily on urban air quality and the development of materials for environmental education. Dr. Allen was a lead investigator for the first and second Texas Air Quality Studies, which involved hundreds of researchers drawn from around the world, and which have had a substantial impact on the direction of air quality policies in Texas. He has also developed environmental educational materials for engineering curricula and for the University's core curriculum. The quality of Dr. Allen's work has been recognized by the National Science Foundation (through the Presidential Young Investigator Award), the AT&T Foundation (through an Industrial Ecology Fellowship), the American Institute of Chemical Engineers (through the Cecil Award for contributions to environmental engineering and through the Research Excellence Award of the Sustainable Engineering Forum), the Association of Environmental Engineering and Science Professors (through their Distinguished Lecturer Award), and the State of Texas (through the Governor's Environmental Excellence Award). He has won teaching awards at the University of Texas and UCLA. Dr. Allen has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy.

### Anderson, David

#### Texas A&M University-Commerce

Dr. Anderson is currently an Assistant Professor at Texas A&M University-Commerce, where he teaches undergraduate and graduate courses in industrial hygiene, safety, environmental law, and risk assessment/management. He holds B.S. in Funeral Service Education from University of Central Oklahoma, an M.P.H. in Environmental Health and a Ph.D. in Occupational and Environmental Health from the University of Oklahoma Health Sciences Center and multiple certifications in these fields. Dr. Anderson has 40 years of experience in air pollution, OSHA enforcement, various manufacturing companies, electrical generation, transportation, and consulting in environmental and health and safety matters.

## Oil Spill Research Strategy Review Candidates

### Bailar, John

#### The National Academies

John C. Bailar III, MD, PhD (statistics) is Professor Emeritus at the University of Chicago and founding Chair of the Department of Health Studies there. For many years, his professional interests centered on the causes and prevention of disease. More recently he has focused on improving quality and performance in science generally. He was at the US National Cancer Institute 1956-1980, Harvard University 1980-1988, and McGill University 1988-1995 before he went to Chicago. At present he is Scholar in Residence at the National Academies. He was a MacArthur Fellow 1990-1995. He has published widely in the statistics and epidemiology literature, including, recently, the health effects of air pollution. His areas of expertise include statistics, epidemiology and risk assessment. He has chaired over 20 National Academy committees and served on numerous others. He has also served as monitor of more than 20 Academy reports.

### Bierman, Victor

#### LimnoTech

Dr. Victor J. Bierman, Jr., is a Senior Scientist at LimnoTech, an environmental science and engineering consulting firm whose home office is located in Ann Arbor, Michigan. He earned an A.B. in Science from Villanova University, and an M.S. in Physics and a Ph.D. in Environmental Engineering from the University of Notre Dame. He is a former U.S. EPA National Expert in Environmental Exposure Assessment, and a former Associate Professor in the Department of Civil Engineering at the University of Notre Dame. He is also a Board Certified Environmental Engineering Member of the American Academy of Environmental Engineers. Dr. Bierman serves on an Independent External Review Panel for the U.S. Army Corps of Engineers St. Johns Bayou and New Madrid Floodway (MO) Consolidated NEPA Document and Project Work Plan, and is a former member of the U.S. EPA Science Advisory Board, Ecological Processes and Effects Committee, to review draft technical guidance on development of numeric nutrient criteria. He also peer reviewed a U.S. EPA linked watershed-water quality modeling system as an alternate approach for development of numeric nutrient water quality criteria. Dr. Bierman has 37 years of experience in the development and application of water quality models for eutrophication and the transport and fate of toxic chemicals. He conducts research and development on projects for federal, state and regional government clients. He also provides scientific peer review and expert testimony on a variety of environmental issues for government agencies, and industrial, regulatory and private clients. He works on assessment and solution of problems related to nutrients, nuisance algal blooms, nitrogen fixation, hypoxia and ecosystem processes. He has conducted these studies in watersheds, lakes, rivers, estuaries and coastal marine systems. He also works on toxic chemical transport, fate, partitioning and bioaccumulation, and has conducted studies in major river systems, estuaries, the Great Lakes, and at U.S. EPA Superfund sites.

### Bossart, Gregory

#### Georgia Aquarium and University of Miami School of Medicine

Dr. Gregory Bossart has spent the last 30 years working in clinical domestic, marine mammal and avian medicine and wildlife pathology on a national and international basis. He has 124 publications focused primarily on the pathologic basis of disease in wild animals. His undergraduate degrees in biology and physical geography are from the University of Pittsburgh. He received his doctorate in veterinary medicine from the University of Pennsylvania. He was a comparative pathology resident and NIH fellow in the Department of Pathology at the University of Miami School Of Medicine. In 1995, he completed his Ph.D. in immunology at Florida International University. He has been in private veterinary practice and presently is a clinical veterinary consultant at facilities in the US, Latin America and Asia. Since 1981, he has been the Medical Director at the Falcon Batchelor Bird of Prey Center at the Miami Museum of Science. Presently, he is Senior Vice President and Chief Veterinary Officer at the Georgia Aquarium in Atlanta Georgia where he oversees the animal care, research and conservation programs. He is an Adjunct Professor in the Department of Pathology at the University of Miami School of Medicine, Adjunct Professor in the Department of Pathology at the University of Georgia College of Veterinary Medicine and on the graduate faculty at the Medical University of South Carolina. His recent published research has documented re-surfing and emerging diseases in manatees, whales, dolphins, and birds. He has helped characterize the first viral disease in manatees and was responsible for developing the first immunohistochemical technique for diagnosing brevetoxicosis (red tide poisoning) in marine mammals and birds. He is particularly interested in the application of aquatic species as sentinels for the effects of global climate change, ecosystem and human health and was part of a United Nations team that attended the epic oil spill following the first Persian Gulf War. Dr. Bossart was awarded the Dean's Clinical Research Award for his work at the University of Miami School Of Medicine. He has collaborative research projects with the National Marine Fisheries Service, NOS, Florida Wildlife Research Institute, National Institute of Environmental Health Sciences and the Miami Museum of Science. Examples of his research can be found in the Journal of the American Veterinary Medical Association, Veterinary Pathology, Journal of Zoo and Wildlife Medicine, Veterinary Record, Journal of Avian Medicine and Surgery, Toxicologic Pathology, Marine Mammal Science, Experimental and Molecular Pathology, Aquatic Mammals, Florida Scientist, Journal of Raptor Research, Journal of Veterinary Diagnostic Investigation, Oceanography, Journal of Wildlife Diseases, Environmental Science & Technology, Journal of Parasitology, Aquatic Toxicology, Veterinary Microbiology and Nature.

## Oil Spill Research Strategy Review Candidates

### Boufadel, Michel

#### Temple University

Dr. Michel Boufadel is a Professor of Environmental Engineering and the Chair of the Department of Civil and Environmental Engineering at Temple University. He holds a B.S. in Civil Engineering (Hydraulics) from the Jesuit University at Beirut, Lebanon (1988), and an M.S. (1992) and a Ph.D. (1998) in Environmental Engineering from the University of Cincinnati. He is a Professional Engineer (Environmental Engineering) in the Commonwealth of Pennsylvania, and a Professional Hydrologist (hydrogeology) as accredited by the American Institute of Hydrology. Dr. Boufadel's area of expertise is Environmental Hydrology and Hydraulics, where he develops methods to understand the behavior of complex hydrologic and environmental systems. He has been the lead researcher on various projects funded by the Oil Spill Research program within the U.S. Environmental Protection Agency (USEPA). Dr. Boufadel is currently investigating the lingering of the Exxon Valdez oil (1989) in the beaches of Prince William Sound. He has conducted floodplain delineation studies for the Federal Emergency Management Agency (FEMA) using hydrologic and hydraulic models developed by the U.S. Army Corps of Engineers and Geographic Information System (GIS). Dr. Boufadel also conducted vulnerability studies of watersheds. He is Associate Editor of the Journal of Water Quality, Exposure and Health. He is author of numerous articles in publications such as Nature Geoscience, Environmental Science and Technology, and Journal of Geophysical Research.

### Brown, Columbus

#### Independent Consultant

Columbus H. Brown retired from the U.S. Fish and Wildlife Service (Service) in 2008 as the Special Assistant to the Regional Director for Fishery Management Commissions and Councils in Atlanta, Georgia. Since retirement, he has served on both the Ecosystems and the Marine Protected Areas Scientific and Statistical Committees of the Gulf of Mexico Fishery Management Council. His distinguished professional career with the Service extended over 35 years as a biologist and administrator. He served as the Regional Director's designee on the South Atlantic, Caribbean and Gulf of Mexico Fishery Management councils as well as the Atlantic and Gulf States Marine Fisheries commissions. In addition, he acted as the Service's primary representative on the Interagency (Federal and State) Gulf of Mexico Program. Mr. Brown coordinated involvements of all Service programs on activities in support of the Councils, Commissions and the Gulf of Mexico Program. As the Service's liaison to the Georgia Aquarium, he provided scientific and technical support during its creation and development. Mr. Brown held the positions of Assistant Regional Director for Fisheries and a Geographic Assistant Regional Director for the States of Arkansas, Louisiana, Mississippi and Tennessee. Prior to that, he oversaw over two billion dollars in grants as the Chief of the Division of Federal Aid in the Washington Office. He directed the Service's Division of Environmental Coordination. He provided scientific and technical support as the National Oil and Hazardous Substances Spill Coordinator. Mr. Brown managed the day-to-day operations of the Service's Galveston, Texas Field Office as Assistant Field Supervisor for the divisions of Biological Services and Ecological Services. His first position with the Service was as a Fishery Biologist in Vero Beach, Florida--investigating permits and licenses and Federal water and transportation projects in Florida and the Caribbean.

### Brown, Kevin

#### Scripps Institution of Oceanography, University of California San Diego

Dr. Brown is currently a professor at Scripps Institution of Oceanography at the University of California. His main areas of interest have evolved from structural geology and tectonics/marine geology and geophysics during his graduate studies at The University of Durham in the UK. These studies involved a combination of onshore offshore structural geology and marine geophysical mapping with the primary aim on understanding the linkage between structure, overpressure development (similar to the problems in the Gulf Coast), and mud diapirism and mélange (chaotic deposit) formation. This directly led to an interest in soil and rock mechanics and a series of papers on the possible impact that fluid migration and fluid production, overpressuring, fault frictional properties and fluid migration may have on fault stability, the structural development of accretionary wedges, and earthquakes. This involved the reevaluation of some geochemical observations to ascertain the validity of hydrologic models. These were largely written during his Postdoctoral (at the University of California at Santa Cruz and Birmingham University in the UK) and early assistant Professor years at Scripps. He also spent some years studying gas hydrates mostly from a structural and hydrologic standpoint. He was heavily involved in Ocean Drilling (ODP) during this period (both as a shipboard participant and in at nearly all levels the science management system). He probably inadvertently also helped promote the introduction of the Japanese Riser Drilling Ship (the Chikyu) through the realization, with a rather limited numbers of others, that better control was needed. This came through the understanding that there were tremendous well stability problems in overpressured formations near active faults. This led to formation of hydrofractures and mini-blow out type effects during our well tests of formation properties with the existant non-riser drill system. This realization was not well received at the time given the data collected was costly and of questionable reliability but it is now accepted (see recent Bekins et al. publication). In later years this led to work in two separate but ultimately related areas. 1) Marine engineering and deep sea submersible studies where he has tended to specialize in the development of hydrologic instrumentation and very lately a geodetic observatories for the study of how fluids interact with active tectonic systems in the marine environment. These studies are increasing focused on dynamic properties of fault motion and earthquakes. He has recently decreased his focus on marine instrumentation for a variety of reasons (not least funding changes) and now is 2) increasingly developing a heavy and concentrating his research focus on experimental and theoretical studies of the low and high speed (up to 1-2m/s) frictional properties of fault zones to come at the "earthquake physics and fault stability problem" from that direction. Recent results indicate the physics involves the underlying intimate coupling between the complex dynamic processes involved in stick-slip behavior itself and the rheology of the gouges under different environmental conditions (such as temperature, normal stress, and system compliance). As such, he is having to address a new field where the properties of faults during the full earthquake cycle are controlled by the complex non-linear interactions between the system's dynamics and thermodynamics. Dr. Brown has served on various advisory committees including NSF panels, the Ocean Observatory Advisory Committee, and many Ocean Drilling Program committees. He has not previously sat on any EPA committees.

## Oil Spill Research Strategy Review Candidates

### Burdige, David

Old Dominion University

Dr. David J. Burdige is a professor and eminent scholar in the Department of Ocean, Earth and Atmospheric Sciences, at Old Dominion University where he has been a faculty member since 1985. He also holds a joint appointment in the Department of Chemistry and Biochemistry. He is an internationally-known expert in marine geochemistry, and he has spent much of his career studying biogeochemical processes in marine and estuarine sediments and their resulting effects on the cycling of carbon, nitrogen, and trace metals such as iron, manganese and copper. He has published more than 50 papers in peer-reviewed publications, and recently authored the book *Geochemistry of Marine Sediments* (Princeton Univ. Press, 2006). He is also an Associate Editor for the journals *Geochimica et Cosmochimica Acta* and *Marine Chemistry*. He received a B.A. (with Honors) in chemistry from Swarthmore College and a Ph.D. in oceanography from the Scripps Institution of Oceanography, University of California at San Diego. He was a post-doctoral scholar at University of North Carolina, Chapel Hill. He is a member of the following professional societies: American Geophysical Union, American Society of Limnology and Oceanography, and The Oceanography Society. He is not currently a member of any advisory committees.

### Burton, G. Allen

University of Michigan

Dr. Allen Burton is Professor and Director of the Cooperative Institute for Limnology and Ecosystems Research in the School of Natural Resources and Environment at the University of Michigan. He holds a B.S. in Biology and Chemistry from Ouachita Baptist University, an M.S. in Microbiology from Auburn University, and a Ph.D. in Environmental Science from the University of Texas at Dallas. Dr. Burton was previously a Professor of Environmental Sciences and Chair of the Department of Earth and Environmental Sciences at Wright State University. His areas of expertise and research interests include: methods to identify significant effects and stressors in contaminated aquatic systems; ecosystem risk assessments evaluating multiple levels of biological organization; and integrating laboratory and in situ toxicity tests with habitat characterizations and physicochemical profiles to determine the role of chemical contaminants among multiple stressors. Dr. Burton was the Brage Golding Distinguished Professor of Research at Wright State University. He has served on the Editorial Board of *Aquatic Ecosystem Health & Management* and on *Chemosphere*, was Co-Editor of *Ecotoxicology and Environmental Restoration*, and has served on numerous other national and international scientific committees, review panels and editorial boards. Dr. Burton will serve as President of the World Council of the Society of Environmental Toxicology and Chemistry.

### Camilli, Richard

Woods Hole Oceanographic Institution

Dr. Richard Camilli is an Associate Scientist in the department of Applied Ocean Physics and Engineering at the Woods Hole Oceanographic Institution. He received his MA and PhD from the Massachusetts Institute of Technology and specializes in development of advanced sensor and instrument systems for oceanographic research. One of his notable developments is a compact, underwater mass spectrometer that is currently being used on an autonomous underwater vehicle to map the BP oil spill plume in the Gulf. Camilli has also participate in other work tracing hydrocarbon leaks in the offshore oil fields, and recently made one of the flow rate measurements from the BP wellhead. He has served as an expert consultant for previous oil spill incidents, as well as for unexploded munitions assessment for Department of Defense and Department of Homeland Security. Besides his academic credentials, relevant training and certification for this advisory board include: Master Diver (Mixed Gas, Rebreather, and Saturation), Sea Survival, Helicopter Underwater Escape (HUET), PEC Safe Gulf & Rig Pass, CPR, First Aid, and DAN Certifications.

### Chapman, Peter

Golder Associates Ltd

Dr. Peter M. Chapman is a Principal and Senior Environmental Scientist at Golder Associates Ltd (Burnaby, BC, Canada). He received his B.Sc. in Marine Biology (1974), M.Sc. in Biological Oceanography (1976), and Ph.D. in Benthic Ecology (1979) at the University of Victoria, BC, Canada. Dr. Chapman's professional areas of specialization are ecotoxicology/toxicity testing, ecological risk assessment, and aquatic ecology. He has directed development and source evaluation studies of contaminants and other stressors in water and sediment involving sewage treatment plants, mining, manufacturing, pulp and paper, wood processing, hazardous waste disposal, landfill operations, oil and gas, smelting and food processing. Dr. Chapman has served as an advisor to the federal governments of both the United States and Canada for environmental toxicology and biomonitoring assessment policy and protocols and directed projects (for government and industry) involving biological monitoring; assessment of contaminant levels in tissues, sediments and water; ecological surveys; literature reviews for ranking environmental contaminants; and, bioassessment (e.g., toxicity testing). He has developed and verified a variety of bioassessment protocols for measuring/ predicting toxicity and bioaccumulation, including the use of benthic indicators for contaminant analysis and various toxicity tests. Dr. Chapman's research was key to the development of the Sediment Quality Triad weight-of-evidence approach to determining pollution-induced degradation in aquatic ecosystems. He is the author of over 170 refereed journal and book publications and over 200 technical reports on subjects including: taxonomy, aquatic ecology, development of monitoring programs, risk assessment, and biological effects of chemicals. Dr. Chapman is Senior Editor for the journal *Human and Ecological Risk Assessment*, Editor of the *Learned Discourses* in the journal *Integrated Environmental Assessment and Management* (IEAM), and serves on the Editorial Boards of the journals *Marine Pollution Bulletin*, *IEAM* and *Environmental Toxicology and Chemistry*. He is a member of the U.S. Environmental Protection Agency (EPA) Science Advisory Board Ecological Processes and Effects Committee. In 1996 Dr. Chapman received an award from EPA Region 10 for resolving environmental issues in Port Valdez, Alaska. In 2001 the Society of Environmental Toxicology and Chemistry (SETAC) awarded Dr. Chapman its highest award, the Founders Award, for an outstanding career and contributions to the environmental sciences.

## Oil Spill Research Strategy Review Candidates

### Clark, James

#### Independent Consultant

Dr. Clark retired from ExxonMobil Research and Engineering in August of 2010 as a Senior Engineering Advisor. Prior to his 18 year career with ExxonMobil, he worked with the US Environmental Protection Agency for 12 years as a research biologist with the US Environmental Protection Agency. He earned a B.S. in Fisheries at the University of Michigan, and an M.S. and Ph.D. in Zoology and Aquatic Ecology from Virginia Polytechnic Institute and State University (Virginia Tech). Dr. Clark has extensive experience in laboratory and field assessments of petroleum industry products and activities, complex effluents, contaminated soils and sediments as well as pesticides and industrial chemicals. He has developed and applied ecological hazard and risk assessment approaches to address a wide variety of environmental issues. Dr. Clark was responsible for environmental assessments of the bioremediation technology developed and applied during the Alaskan Oil Spill clean-up program. For over 10 years, he had a leadership position in ExxonMobil's Oil Spill Research Program for Refining and Supply, and played a corporate and industry leadership role in the development and evaluation of environmentally relevant techniques and strategies for oil and chemical spill response. Dr. Clark is active in several professional/technical organizations involved with ecological risk assessment and serves on a number of professional, academic, and governmental advisory panels. Dr. Clark has authored over 85 peer-reviewed publications, and nearly 100 technical presentations at national and international meetings and symposia.

### Corcoran, George

#### Wayne State University

Dr. Corcoran is Professor and Chairman of the Department of Pharmaceutical Sciences, College of Pharmacy & Health Sciences, Wayne State University, and Adjunct Professor of Pediatrics, Wayne State University School of Medicine. He earned his B.A. in Chemistry (Ithaca College - 1970), M.S. in Chemistry (Bucknell University - 1973), and Ph.D. in Pharmacology and Toxicology (George Washington University - 1980), before completing Postdoctoral training in Toxicology (Baylor College of Medicine, The Methodist Hospital - 1981). Prior to his Wayne State appointment, Dr. Corcoran served as Assistant Professor of Pharmaceutics at the State University of New York at Buffalo, followed by 9 years at the University of New Mexico in Albuquerque as Associate Professor and later Professor, and Director of the Toxicology Graduate Program. Dr. Corcoran has published over 170 original research papers, reports, and abstracts, and has received nearly \$4 million in grants and contracts as Principal Investigator, Co-Principal Investigator, and Co-Investigator. He has chaired grant review panels for the NIH, the National Academies, and the Howard Hughes Medical Institute, and refereed papers for more than 50 national and international scientific journals. He has contributed to the training of over 150 MS and PhD graduates, 2500 pharmacists, and hundreds of undergraduate research students. His research interests are multidisciplinary and translational. They focus on cellular injury and cell death, as well as factors governing chemical- and drug-induced injuries, including drug metabolism and nutrition. Approaches designed to translate basic discoveries to improve human and environmental health involve integrated in vivo models, cellular and molecular biology, pharmacokinetics, synthetic chemistry, and retrospective and prospective clinical investigation of human volunteers and patients. Specific areas of investigation include cell death by necrosis and apoptosis, the role of DNA damage in acute cell death, drug and chemical injury to the liver, role of nutrition and obesity in drug and chemical injury, drug biotransformation including by CYPs, and particularly the toxicity of drugs such as acetaminophen (paracetamol). At the University of New Mexico, Dr. Corcoran served under Vice President for Health Sciences Jane Henney (FDA Commissioner 1998-2000) as a member of her Health Sciences Leadership Council. He is now Past President of the Society of Toxicology, a 6,500-member organization of academic, industry and government scientists practicing in the USA and 60 foreign countries. He has contributed to Society positions having national and international impact, ranging from the best science for rational safety legislation, to organizational ethics and governance. Dr. Corcoran is a Fellow of the Academy of Toxicological Sciences. Since 2004, he has been a Delegate to the International Congress of Toxicology and member of the International Union of Toxicology Developing Countries Committee. He is a past Member of the Scientific Advisory Board of the US Environmental Protection Agency, is Chair-Elect of the Executive Board of the Council of Scientific Society Presidents, and is a member of the intergovernmental Scientific Advisory Committee on Alternative Toxicological Methods. He has contributed to the scientific direction of the American Society for Pharmacology and Experimental Therapeutics as a member of its Scientific Council, and served on the Research and Graduate Affairs Committee of the American Association of Colleges of Pharmacy. Dr. Corcoran's opinion is sought as an expert witness in toxic tort, product liability and other legal matters. He serves as Associate Editor of Toxicology and Applied Pharmacology [2002-date] and Editorial Board Member of the international journals Pharmacology and Toxicology [1992-date] and Basic and Clinical Pharmacology [2002-date]. Past Editorial Board memberships include Toxicology Letters and the Journal of Toxicology and Environmental Health. During 5 years of service on the National Institutes of Health Alcohol-Toxicology 1 Study Section, he reviewed over 1000 NIH grant applications.

### Daston, George

#### Procter & Gamble

Dr. George Daston is Victor Mills Society Research Fellow at the Procter & Gamble Company. He has published over 100 articles and book chapters and edited five books in toxicology and risk assessment. His current research efforts are in the areas of toxicogenomics and mechanistic toxicology, particularly in addressing how findings in these fields can improve risk assessment for chemicals and the development of non-animal alternatives. Dr. Daston has served as President of the Teratology Society, Councilor of the Society of Toxicology, on the EPA Board of Scientific Counselors, National Toxicology Program Board of Scientific Counselors, National Research Council's Board of Environmental Studies and Toxicology, and National Children's Study Advisory Committee. He is Editor-in-Chief of Birth Defects Research: Developmental and Reproductive Toxicology. Dr. Daston manages the AltTox website, which is devoted to the exchange of scientific information leading to the development of in vitro replacements for toxicity assessments. Dr. Daston has been awarded the Josef Warkany Lectureship by the Teratology Society, the George H. Scott Award by the Toxicology Forum, and was elected a Fellow of AAAS. Dr. Daston is an adjunct Professor of Pediatrics at University of Cincinnati.



## Oil Spill Research Strategy Review Candidates

### Diaz, Robert

College of William and Mary

Dr. Robert Diaz is currently a Professor of Marine Science with the Virginia Institute of Marine Science, College of William and Mary in Virginia. He received a Ph.D. in Marine Science from the University of Virginia in 1977 and in 1996 a Doctor Honoris Causa from Gothenburg University, Sweden for his contributions to benthic ecology over the years. His area of expertise and research interests center around understanding the consequences of low dissolved oxygen (hypoxia) to ecosystem functioning and organism-sediment interactions (bioturbation). In particular, how perturbations of functions and processes influence energy flow. He has estimated the relative resource value of the various estuarine and marine benthic habitat types and how hypoxia affects energy flows. The goal is to quantify energy flow between habitats and develop environmentally sound management strategies. In addition, he is also interested in the application of the statistical and numerical methods to biological data, and broadly interested in the ecology and taxonomy of estuarine and marine invertebrates with specialization in oligochaetes.

### Dickins, David

DF Dickins Associates, LLC

David Dickins has over 38 years of project management experience focusing on environmental issues associated with offshore oil exploration and development, and marine transportation. He holds a B.A.Sc. in Mechanical Engineering from the University of British Columbia. His company, DF Dickins Associates, provides engineering research services for government and industry clients in the United States, Canada, Russia, Scandinavia, and Europe. Mr. Dickins is an internationally recognized as an expert on arctic sea ice and marine environments and oil spills in remote regions. Over the past five years, his work has led to the adoption of ground penetrating radar as a proven tool in detecting oil buried under snow and ice from the surface. In 2010, Mr. Dickins contributed a chapter on oil pollution in ice-Covered waters as part of the Ice Navigation Manual published in the UK. He is currently directing a joint industry project together with the Department of Interior's Bureau of Ocean Energy Management, Regulation and Enforcement to develop a new higher-powered radar system to detect oil spills in the Arctic from a low-flying helicopter. Mr. Dickins has participated in numerous environmental hearings and native community meetings as an expert witness. His background includes managing hundreds of research projects for government and industry clients, authoring or contributing to over 70 conference papers and journal articles, and organizing and chairing six international conferences on oil spill and transportation issues.

### Edmiston, Paul

College of Wooster

Dr. Paul L. Edmiston is Peterson Chair of Chemistry at the College of Wooster and a Research Fellow at the Georgia Tech Research Institute. He holds a B.S. and Ph.D. in Chemistry from Pepperdine University and the University of Arizona, respectively. He is also Chief Science Officer and Founder of ABSMaterials Inc. Paul has invented numerous versions of swellable glass materials (Osorb™) capable of capturing targeted species of organic solvents, explosives, pesticides and related agents from water. Edmiston has received over \$1.2 million in externally funded grants including a National Science Foundation CAREER Award in 2001 and a NSF RAPID award this year developing tools to treat seawater in the wake of the Deepwater Horizon accident. Osorb is the trademarked commercial name for swellable organically modified silica which can absorb to up 8X its own weight in organic liquids such as petroleum. The chemistry of using Osorb glass to capture volatile organics is becoming well established in the remediation space. Currently, Osorb-based technology is being developed for use to treat produced water and flow back water as funded by the U.S. Department of Energy and National Science Foundation. The technology was examined and validated by the U.S. Coast Guard for use in Gulf clean-up. Through his work in advanced water purification, Dr. Edmiston has become expert in removal of dissolved and dispersed petroleum from water. He has done research into the extraction of surfactants and dispersants from seawater. Dr. Edmiston has published 30 research articles in journals such as Journal of the American Chemical Society, Separation and Purification Technology, Analytical Chemistry, Biochemistry, Analytica Chimica Acta, and Chemistry of Materials. He has given invited presentations at several national conferences and universities, and most recently presented his research on water purification at the University of Illinois and at the American Chemical Society. Edmiston research has also focused on chemical sensor technology applied to the detection of explosives, pesticides, and hydrocarbons in water.

## Oil Spill Research Strategy Review Candidates

### Ehlig-Economides, Christine

Texas A&M University

Dr. Ehlig-Economides is currently full Professor of Petroleum Engineering at Texas A&M University in the Albert B. Stevens Endowed Chair. She holds a BA in Math-Science from Rice University, 1971, an M.S. in Chemical Engineering from the University of Kansas, 1977, and a Ph.D. in Petroleum Engineering from Stanford University (1979). Dr. Ehlig-Economides worked for Schlumberger for 20 years in well test design and interpretation, integrated reservoir characterization, modern well construction design, and well stimulation. She is internationally recognized for her expertise in reservoir engineering, pressure transient analysis, integrated reservoir characterization, complex well design, and production enhancement. Dr. Ehlig-Economides' recent research interests include shale gas production engineering and CO2 sequestration. She was a member of the NAE Committee on America's Energy Future, and is currently a member of the National Academy Board of Energy and Environmental Systems (BEES). Dr. Ehlig-Economides is a member of the National Academy of Engineering. She established the Center for Energy, Environment, and Transportation Innovation (CEETI) is currently working to introduce degree programs and research in Energy Engineering. She has worked in more than 30 countries, published more than 60 papers, and received numerous awards from the Society of Petroleum Engineers.

### Ehrenfeld, Joan

Rutgers University

Dr. Joan Ehrenfeld is Professor of Ecology at Rutgers University, where she has studied ecosystems of New Jersey in virtually all parts of the state. She holds a B.A. in Biology from Barnard College, Columbia University, an M.A. in Biology from Harvard University, and a Ph.D. in Biology from City University of New York. Dr. Ehrenfeld's work has covered a broad array of topics, including many aspects of wetland ecology, plant ecology, soil and ecosystem ecology, the biology of invasive species, and restoration ecology. Her work on New Jersey's wetlands has included studies of water quality, hydrology, nutrient cycling, plant communities, soil microbiology, the impacts of urbanization, and invasive species. Dr. Ehrenfeld has conducted these studies in wetlands ranging from the most urban areas of northeastern New Jersey to the limestone valley of Sussex county, the coastal marshes of the Hackensack Meadowlands and the Delaware shore, the forested wetlands throughout the state, and includes a long series of studies of all types of Pinelands wetlands. She is currently widely recognized for her work on urban wetlands. Dr. Ehrenfeld has also studied a wide range of New Jersey's upland communities, from Worthington State Park on the Kittatinny ridge through the Highlands to the Sourlands, the Piedmont, and the Pinelands, also working on both plant and soil ecology. She is currently widely recognized for her work on the ecosystem impacts of invasive species. Dr. Ehrenfeld's broad experience with New Jersey's ecosystems has been paralleled by a long history of contributing to state panels; she currently serves on the N.J. Wetland Mitigation Council and the N.J. Invasive Species Council, and has served on a variety of other advisory panels previously. She also has broad experience with water resource issues. As Director of the N.J. Water Resources Research Institute, Dr. Ehrenfeld worked with a wide variety of public and private interests, and an equally wide range of water resource issues. She is currently serving a second term on the Water Science and Technology Board of the National Research Council (NRC) of the National Academy of Science, and on several study committees of the NRC addressing water issues, experience which has brought her into contact with leading water scientists around the country. In summary, Dr. Ehrenfeld has had an exceptionally broad range of experience with both terrestrial and aquatic ecology, with New Jersey's ecosystems, and with the application of ecological knowledge to policy.

### Frazer, Thomas

University of Florida

Dr. Frazer is currently a Professor in the School of Forest Resources and Conservation at the University of Florida. He holds a B.S. Marine Fisheries from Humboldt State University, an M.S. in Fisheries and Aquatic Sciences from the University of Florida and a Ph.D. in Biological Sciences from the University of California Santa Barbara. His research interests are to develop and transfer into management a mechanistic understanding of the effects of nutrients and other anthropogenic stresses on aquatic systems, with a major focus on rivers and estuaries along the Gulf coast. Dr. Frazer has held more than 20 interdisciplinary collaborative grants in the last five years. Analyses in these grants include broad scale water quality assessments, nutrient dynamics, biogeochemical processes, population-level investigations, food web interactions, restoration of aquatic ecosystems, and fisheries ecology. The patterns documented by these regional programs that regularly sample over 100 stations spanning more than 100 kilometers of coastline provide a spatial and temporal context for designing, implementing and interpreting interdisciplinary experiments that elucidate ecological processes shaping the structure and function of aquatic ecosystems. Dr. Frazer serves as Associate Editor of Gulf of Mexico Science, reviews manuscripts for a broad suite of scientific journals, regularly serves as a panelist to review research proposals submitted to federal agencies, serves as chair of the faculty advisor committee for the University of Florida's Water Institute, is a member of the Land-Ocean Interactions in the Coastal Zone working group on "Global Environmental Change in the Coastal Zone: A Socio-Ecological Integration", serves as a member of the Florida Department of Environmental Protection Technical Advisory Committee on Marine Numeric Nutrient Criteria, and most recently serves as a member of the State University System's Oil Spill Academic Task Force and Chair of the University of Florida's Oil Spill Task Force.



## Oil Spill Research Strategy Review Candidates

### Gaasterland, Terry

University of California San Diego

Dr. Gaasterland is an expert in the genetics and genomics of marine microbial organisms and environmental genomics. Her work focuses on the computational analysis of genomes, horizontal gene transfer, and microbial evolution. After completing her Ph.D. in Computer Science in 1992, she spent six years at the Department of Energy (DOE) and University of Chicago developing software to find genes in microbial genomes, trace their evolutionary history, and compare metabolic pathways represented in communities of microbial organisms. In 2003, Dr. Gaasterland moved to the Scripps Institution of Oceanography to start the Scripps Genome Center, which harnesses high-throughput DNA and RNA sequencing and computation to analyze whole de novo genomes, "metagenomes" (DNA from the environment) and re-sequencing of genomes. The Scripps Genome Center co-locates its computer infrastructure at the San Diego Supercomputing Center and takes advantage of SDSC's NSF-funded large computer clusters. Dr. Gaasterland has been a member of the NSF Advanced Computing and Cyber-Infrastructure committee which advises the NSF Director's office on developing cyber-infrastructure nationwide for scientific research support.

### Grant, Stanley B.

University of California, Irvine

Dr. Stanley Grant is currently a Professor in the Departments of Chemical Engineering and Materials Science (primary) and Civil and Environmental Engineering (courtesy) at the University of California, Irvine. In addition, Dr. Grant is a Visiting Chair of Hydrology and Water Resources in the Department of Civil and Environmental Engineering at the University of Melbourne (Australia) for summer periods from 2010 through 2013. Dr. Grant holds a B.S. with distinction in Geology from Stanford University in 1985, and an M.S. and Ph.D. in Environmental Engineering and Science in 1990 and 1992, respectively, from California Institute of Technology. Dr. Grant was Assistant Professor at UCI from 1991-96, Associate Professor at UCI from 1996-2001, Professor at UCI from 2001 to present, and Chair of the Department of Chemical Engineering and Materials Science from 2002 to 2009. His professional interests include environmental engineering, coastal water quality, colloidal contaminants, and environmental microbiology. Dr. Grant has published 46 peer-reviewed journal articles in the water quality area that have been collectively cited over 1000 times, and supervised eight Ph.D. students, many of whom have gone on to successful careers in academia as professors at Stanford University, University of Mississippi, Ohio State University, California State University Long Beach, and Gwangju Institute of Science and Technology (S. Korea). He served on the U.S. Environmental Protection Agency's Science Advisory Board (Drinking Water Panel) from 2000 to 2009, and actively serves as a reviewer and panelist for research journals and research funding agencies.

### Harris, Cynthia M.

Florida A&M University

Dr. Harris attended the University of Kansas, where she received a B.A. (Honors' degree) in biology (1978) and a M.A. in genetics (1981). She received her Ph.D. in the biomedical sciences from Meharry Medical College in 1985, with concentration in the areas of nutritional biochemistry and toxicology. Dr. Harris was awarded a postdoctoral fellowship in the Interdisciplinary Programs in Health of the Harvard School of Public Health, where she conducted research regarding the effects of heavy metals on pulmonary function and environmental risk assessment. She is a Diplomat of the American Board of Toxicology (DABT). From 1990-1996, Dr. Harris served as a staff toxicologist and branch chief with the Agency for Toxic Substances and Disease Registry, a sister agency of the Centers for Disease Control and Prevention, in Atlanta, Georgia. Dr. Harris was the first African American branch chief of the Agency for Toxic Substances and Disease Registry. As branch chief of the Community Health Branch, she was responsible for the administration and management of staff who conducted environmental health assessments, at the request of individual citizens and community groups across the nation. In 1996, Dr. Harris accepted the position of Director of the Institute of Public Health at Florida A&M University. Since her tenure, she has been actively engaged in the general planning and development of the MPH program. The 1997 Florida State Legislature approved and appropriated funding to support the MPH program and the MPH program received full, maximum accreditation for its initial review (2000-2005). Dr. Harris has served on numerous committees and panels, which includes membership on the Board of Directors for the Florida Public Health Association, Chair of the Florida Public Health Partnership Council on Stroke, member of the Pregnancy Mortality Review Board, member of the Florida Sickle Cell Task Force, member of the American Public Health Association, member of the editorial board of the Harvard Journal of Public Health, reviewer for the Journal of Environmental Health, and board member for the Panhandle Chapter of the Florida March of Dimes. She has also provided a review for the Food and Nutrition Board of the National Academy of Sciences. She is a Full Member of the Society of Toxicology and was appointed by the Secretary of the U.S. Department of Health and Human Services to the Agency for Toxic Substances and Disease Registry Board of Scientific Counselors. In addition, she has served on numerous grant reviews for several federal agencies such as CDC, NIOSH, NIEHS and HRSA. She was also a panel member for the IOM Committee on the Gulf War and Health and was recently appointed by Congresswoman Donna Christensen to the Congressional Black Caucus Homeland Security Advisory Board. In December of 2004, Dr. Harris was appointed to the Council on Education for Public Health (CEPH) Board of Councilors for a three year term. CEPH is the national accrediting agency for all public health programs and schools of public health.

### Hurd, Scott

Iowa State University - Ames, IA

Dr. Hurd is currently an Associate Professor at Iowa State University. He holds a Ph.D. from Michigan State University in epidemiology, minor in economics, a D.V.M. Iowa State University and B.S. Virginia Polytechnical Institute and State University. Dr. Hurd served as the country's leading food safety veterinarian in the USDA responsible for reducing toxicological and microbiological hazards in the U.S food supply. He has been a leading researcher in risk assessment, epidemiology, and food safety, including topics such as BSE, Salmonella, Avian Influenza and antibiotic resistance. He currently serves on several expert panels and has been teaching probabilistic and toxicological risk assessment for 6 years.

## **Oil Spill Research Strategy Review Candidates**

### **Johnston, Robert**

#### **Clark University**

Robert J. Johnston is Director of the George Perkins Marsh Institute and Professor of Economics at Clark University. He received his BA from Williams College and PhD from the University of Rhode Island. He is currently President of the Northeastern Agricultural and Resource Economics Association and Vice President of the Marine Resource Economics Foundation. Professor Johnston is also currently on the Program Advisory Committee for the Charles Darwin Foundation, the Science Advisory Board for the Communication Partnership for Science and the Sea (COMPASS), and the Gulf of Maine Regional Ocean Science Council. As Director of George Perkins Marsh Institute, Professor Johnston leads Clark University's worldwide efforts to study human dimensions of environmental change. He was previously Associate Director of Connecticut Sea Grant. Over the past 20 years Dr. Johnston has served in numerous advisory capacities to public/private international, national, state and local agencies. Most recently, he was an invited expert in the US EPA Workshop on Indicators of Final Ecosystem Services for Wetlands and Estuaries. Professor Johnston is an environmental and resource economist with internationally recognized expertise in the valuation of non-market commodities and ecosystem services, benefit transfer, and the management of aquatic, coastal and ecological resources. His work on valuation, benefit transfer, coastal and ocean management, and environmental economics has contributed to national, state and local policy in the US, Canada and elsewhere. He has particular experience in quantification of economic benefits of wetlands, estuaries and aquatic systems; his published work in this area has been used as the basis for both regulatory policy development and natural resource damage assessment for coastal systems, salt/freshwater wetlands, and other aquatic environments. He has also conducted extensive research on the economics and management of fisheries, tourism and coastal resources nationwide, including the Gulf of Mexico.

### **Kapalavai, Hari**

#### **Camp Dresser &McKee Inc.**

Mr. Kapalavai is an environmental engineer experienced in designing wastewater treatment facilities, conducting wastewater studies, preparing operation and maintenance manuals, developing process flow diagrams, and preparing piping and instrumentation diagrams, hydraulic profiles, and general arrangement drawings for wastewater treatment plants at Camp Dresser McKee. He has two M.S. degrees Civil Engineering and Public Health from Bradley University. He earned his B.S. in Civil Engineering from Osmania University, India. His areas of expertise are mostly water and wastewater. He currently serves as a committee member for various technical committees with American Water Works Association, Environmental and Water Resources Institute (EWRI) of American Society of Civil Engineers and Water Environment Federation.

### **Kleinman, Michael T.**

#### **University of California, Irvine**

Dr. Michael T. Kleinman is an Inhalation Toxicologist, a Professor of Occupational and Environmental Medicine in the Department of Medicine and the Co-Director of the Air Pollution Health Effects Laboratory at the University of California, Irvine (UCI), where he has been since 1982. He was previously an environmental scientist with the U.S. Atomic Energy Commission (AEC) and he later directed the Aerosol Exposure and Analytical Laboratory at Rancho Los Amigos Hospital in Downey, CA. He is a toxicologist and with a primary research interest in the study of health effects caused by exposures to inhaled environmental contaminants. He holds a M.S. in Chemistry (Biochemistry) from the Polytechnic Institute of Brooklyn and a Ph.D. in Environmental Health Sciences from New York University. He has published more than 100 articles in peer-reviewed journals dealing with environmental contaminants and their effects on cardiopulmonary and immunological systems and on global and regional distribution of environmental contaminants including heavy metals and radioactive contaminants from nuclear weapons testing and manufacture. He served on two National Research Council committees that examined issues in protecting deployed U.S. Forces from the effects of chemical and biological weapons. Dr. Kleinman has previously served on U.S. EPA Clean Air Scientific Advisory Committee (CASAC) panels, is a member of the USEPA STAA committee and currently serves as the Chair of the California Air Quality Advisory Committee. His current research focuses on health effects of inhaled particles, including nanomaterials and ultrafine, fine and coarse ambient particles in humans and laboratory animals. His recent studies demonstrate that inhalation of combustion-generated particles can promote airway allergies and accelerate the development of cardiovascular disease and that these effects may be associated with organic and elemental carbon components of the ultrafine fraction of the ambient aerosol.

### **Lee, Kenneth**

#### **Bedford Institute of Oceanography**

Dr. Lee is Senior Research Scientist and Section Head under the Environmental Research Division, Bedford Institute of Oceanography and the Executive Director of the Centre for Offshore Oil, Gas and Energy Research (COOGER) reporting to the National Science Directors Committee (NSDC), through the Regional Director of Science (Maritimes Region). He holds a B.S in Biology from Dalhousie University, an M.S. and Ph.D. in Botany and Environmental Studies from the University of Toronto. He is an internationally recognized in the field of aquatic sciences with over 25 years of field and laboratory research experience. Author of 300+ scientific and technical publications Substantial experience and proven capability in design and application of research and monitoring programs for the development of policy and regulations to ensure the health and sustainability of the aquatic environment and its living resources

## Oil Spill Research Strategy Review Candidates

### Leschine, Thomas

University of Washington

Thomas Leschine is Director and Professor at the School of Marine Affairs and Adjunct Professor of Fisheries at the University of Washington. He is currently a member of the Marine Board of the National Research Council. His research interests are in the areas of environmental decision-making in relation to marine environmental protection and the use of scientific and technical information and expertise in environmental decisions. He has served on numerous National Research Council panels and chaired the NRC Committee on Remediation of Buried and Tank Wastes, 1996-2000. In Washington State he serves on the Nearshore Science Team of the Puget Sound Nearshore Partnership, a multi-agency consortium developing a major program of environmental restoration for Puget Sound, and also as a member of the Science Panel of the Puget Sound Partnership. In 2008-09 he advised the Joint Legislative Audit and Review Committee of the Washington State Legislature on the alignment of taxation policies and risk in relation to funding for the State's spill prevention and response programs. He served on the Washington State Pilotage Commission, by appointment of the Governor, from 1992-98. Earlier, he led the U.S Coast Guard team that produced the Federal On-Scene Coordinator's Report following the 1989 T/V Exxon Valdez oil spill (1993). Following service in 2007-08 on an NRC panel that developed a comprehensive framework for assessing the risks of oil spills in the Aleutian Islands, he was appointed to the NRC's Marine Board (2008). Dr. Leschine received his PhD in mathematics from the University of Pittsburgh, specializing in mathematical logic. His transition to a career in marine policy came by way of a post-doctoral position in marine policy, and later as a policy associate, at The Woods Hole Oceanographic Institution in Woods Hole, Massachusetts.

### McHugh, Martin

New Jersey Dept. Environmental Protection

Mr. McHugh's 25 year career in public service working for NJDEP and NOAA has focused on fish and wildlife management, oil spill response, natural resource damage assessment/restoration, hazardous site cleanup, enforcement and environmental law. Currently he is a deputy to the Assistant Commissioner for NJDEP's enforcement programs for water resources, hazardous/solid waste, air, land use and pesticides. In this capacity, Mr. McHugh coordinates large/complex multimedia cases across these enforcement programs to create a holistic agency-wide approach and to infuse settlements with environmentally beneficial projects to restore fish, wildlife and habitat, and provide enhancements for public access to natural resources. Mr. McHugh has an undergraduate degree in Economics and Environmental Studies from Rutgers University and a law degree from Seton Hall University School of Law. As a Deputy Attorney General, he oversaw New Jersey's first natural resource damage assessments and litigation for major oil spills, including the Exxon Bayway Refinery, BT Nautilus and Presidente Rivera incidents. He then established and directed one of the country's first state programs for natural resource damage and restoration and also served as a Natural Resource Trustee Representative while working with NOAA to address assessment/restoration of significant contaminated harbors in the Great Lakes. As the Director of New Jersey's Fish & Wildlife agency, Mr. McHugh managed the state's wildlife, fisheries and habitat conservation programs, including marine and freshwater fisheries, endangered species, wildlife health, environmental research, public education, and the management of over 300,000 acres of public land. He has served on scientific advisory councils and boards such as the Atlantic Coast Joint Venture, Atlantic Flyway Council and the Conserve Wildlife Foundation. As a result of his expertise, he has lectured extensively on environmental science/law, including damage assessment/restoration at relevant forums, such as the Coast Guard's Atlantic Coast Strike Team's Advanced Oil Spill Response Seminar, the Society of Environmental Toxicology and Chemistry and, the Society For Ecological Restoration.

### Mendelssohn, Irving

Louisiana State University

Dr. Mendelssohn is currently an Adjunct Professor in the Department of Oceanography & Coastal Sciences at Louisiana State University. He holds a Ph.D. Coastal Plant Ecology and Ecophysiology from North Carolina State University. The focus of his research is basic and applied coastal plant ecology. His primary research interests are 1) the influence of environmental constraints, natural and human-induced, on plant distribution and productivity and 2) the ecophysiological responses that allow coastal vegetation to adapt to these environmental limitations. More specifically, recent research has centered on the effects of salinity and flooding on the growth and adaptive responses of various fresh and salt marsh plant species, the development of stressor-specific and integrative indicators of sublethal stress in wetland vegetation, an analysis of the causes of vegetation dieback in coastal marshes, and the effects of disturbance on the ecology and restoration of coastal vegetation. I am especially interested in research that emphasizes an interdisciplinary approach in addressing ecological questions.

### Mihelcic, James R.

University of South Florida

James R. Mihelcic is a Professor of Civil and Environmental Engineering and State of Florida 21st Century World Class Scholar at the University of South Florida. He directs the Peace Corps Master's International Program in Civil & Environmental Engineering (<http://cee.eng.usf.edu/peacecorps>). His research interests are centered around sustainability, specifically understanding how global stressors such as climate, land use, and urbanization influence water resources, water quality, and provision of sanitation. Dr. Mihelcic is a past president of the Association of Environmental Engineering and Science Professors (AEESP) and is currently a Board Certified Environmental Engineering Member and Board Trustee with the American Academy of Environmental Engineers (AAEE). He is lead author for 3 textbooks: Fundamentals of Environmental Engineering (John Wiley & Sons, 1999); Field Guide in Environmental Engineering for Development Workers: Water, Sanitation, Indoor Air (ASCE Press, 2009); and, Environmental Engineering: Fundamentals, Sustainability, Design (John Wiley & Sons, 2010).

## Oil Spill Research Strategy Review Candidates

### Miller, Judith

Brendan Environmental

Judy Miller has been involved in oil spill planning, prevention, response, training, drilling, equipment deployment/testing and related activities since 1989. She has represented many vessel owners as a qualified individual, responded to spills in many capacities including representing underwriters, and worked for Alyeska Pipeline Service Company's Ship Escort/Response Vessel System in many roles including Advisor to the Director. Judy has been an active participant with the Prince William Sound Regional Citizen's Advisory Council and the Alaska Regional Response Team. Judy was recently engaged in Arctic Outer Continental Shelf oil spill planning, until the recent moratorium. She is currently engaged in researching Alternative Planning Criteria for the Aleutian Islands on the Great Circle Route. She holds a B.S. in Environmental Technology University of Alaska, Anchorage.

### Murphy, Eileen

Rutgers University

Dr. Eileen Murphy is the Director of the New Jersey Department of Environmental Protection (NJDEP) Division of Science, Research and Technology. Before becoming Director in 2004, she served as Assistant Director for four years and as a research scientist for 15 years within the group, developing an expertise in the drinking water field. Dr. Murphy holds a B.S. in English with a minor in Biology from the University of Notre Dame, an M.S. in Environmental/Outdoor Education from Northern Illinois University, and a Ph.D. in Environmental Science from Rutgers University. Dr. Murphy has focused much of her career on drinking water science, including contaminant occurrence and fate & transport. She has been involved in the issue of lead service line replacement and has a broad expertise in the issue of infrastructure aging, particularly as it relates to contamination of drinking water. She is also experienced in the issue of unregulated contaminants in drinking water and the treatment to remove them from finished water. Her particular research emphasis is on exposures to toxic substances, fate and transport of toxic substances and assessments of the potential risks to human health and the environment posed by these exposures. She is co-author on numerous peer-reviewed scientific papers that have appeared in scholarly journals, including Environmental Science and Technology. In addition to her work with the NJDEP, Dr. Murphy is serving on a National Academy of Sciences Air Transportation Research Board panel, which is charged with investigating the influence of environmental factors on emissions of hazardous air pollutants from jet engines. Before coming to NJDEP, Dr. Murphy served as Assistant Director for the Douglass Project for Rutgers Women in Math and Science and as a Project Manager for the Center for Math, Science and Computer Education at Rutgers University.

### Nonomura, Arthur

Scripps Institution of Oceanography, University of California San Diego

Arthur Nonomura holds doctorate in botany from the University of California Berkeley. He has expertise in ecosystem management with emphasis on microbial and marine botanical ecologies. Dr. Nonomura is currently a Research Associate with the Marine Biology Research Division of Scripps Institution of Oceanography. He has been collaborating with Professor Emeritus Andrew A. Benson on the completion of several research projects in the Nobel Series, The Path of Carbon in Photosynthesis. Dr. Nonomura has experience with ecosystem management of massive protistan blooms in San Francisco Bay, working with A. J. Horne, Sanitary Engineering Research Laboratory, UC. They coordinated resources from the University of California, the Army Corps of Engineers, NASA, Moffett Field and the City of Alameda to develop and implement a solution that has been in place and effective for 33 years.

### O'Donnell, James

University of Connecticut

Professor O'Donnell is a coastal physical oceanographer in the Department of Marine Sciences at The University of Connecticut. He holds a B.S. with Honors in Applied Physics from the University of Strathclyde, an M.S. Marine Studies and a Ph.D. in Oceanography from the University of Delaware. His research is aimed at understand the physical processes that determine the circulation and transport of materials in the coastal ocean. With students and research associates, he is currently involved in both the construction and testing of models and the development of observational techniques. He is also interested in fundamental geophysical and environmental fluid dynamics and the application of mathematical and statistical methods to the development of models of biogeochemical processes. In the last decade Prof. O'Donnell has been involved in the development of a permanent ocean observing system in Long Island Sound and the adjacent shelf. This multi-use infrastructure informs environmental managers, the general public as well as providing new scientific insights. The availability of this type of data has provoked new applications and Prof. O'Donnell has collaborated with the U.S. Coast Guard to develop an improved drift prediction system for the search and rescue applications. Prof. O'Donnell has contributed to the administration of the University of Connecticut as chair of the Committee on Courses and Curricula of the College of Liberal Arts and Sciences as Interim Head of the Department of Marine Sciences and Interim Director of the Marine Science and Technology Center. He is a Director of both the North East Regional Association of Coastal Ocean Observing Systems and the Middle Atlantic Coastal Ocean Observing Regional Association. He has been appointed to the Bi-State Commission on Long Island Sound.

## **Oil Spill Research Strategy Review Candidates**

### **Orlov, Alexander**

#### **SUNY Stony Brook**

Dr. Alexander Orlov is an Assistant Professor of Materials Science and Engineering at State University of New York, Stony Brook, USA. He is also a faculty member of the Consortium for Interdisciplinary Environmental Research. Previously, he was a Research Fellow in Science and Engineering at the University of Cambridge/King's College, UK. Dr. Orlov has 5 degrees from various European and the US institutions, including Doctoral and Master's degrees in Chemistry from the University of Cambridge (UK) and Master's degree in Engineering from the University of Michigan (USA). His major research and teaching activities are in development of novel materials for environmental protection, environmental chemistry and engineering, materials science, sustainable development, environmental aspects of energy production and environmental nanotechnology areas. His current work is focused on studies of pollutant interactions with mineral surfaces utilizing various spectroscopic techniques, development of novel materials for visible-light photocatalytic applications; synthesis of high surface area materials, such as mesoporous molecular sieves, and their applications for environmental remediation; and development of novel nanomaterials for environmental protection. Dr. Orlov teaches several undergraduate and graduate courses in environmental materials science and engineering. In the past, he taught several courses in environmental engineering and chemistry at the University of Michigan and in sustainable engineering at the University of Cambridge. He is appointed by the UK Secretary of State to advise the current Labour Government on such environmental issues as exposure to hazardous substances and environmental/health impacts of nanotechnology. Previously, he was a member of the UK Conservative Party Task Force charged with developing the science policy for the next Conservative Government. Dr. Orlov has served on science grant panels for the EU Commission, the UK Department of Environment, Food and Rural affairs, and other funding bodies. Dr. Orlov is a recipient of National Endowment for Science Technology and Arts CRUCIBLE award (UK), which focuses on developing skills in communicating science to general public and policymakers..

### **Perkins, Robert A.**

#### **University of Alaska**

Dr. Robert A. Perkins is a professor of Civil and Environmental Engineering at the University of Alaska Fairbanks. He holds a Ph.D. in Toxicology from the University of North Carolina Chapel Hill. Dr. Perkins' Ph.D. dissertation was The Toxicokinetics of Inhaled Methanol. Following a 20-year career of designing and building marine, industrial and heavy construction projects, his interest in human health and risk evaluation led him to pursue a doctorate in toxicology. His appointment in UAF's College of Engineering and Mines combines teaching engineering and construction management, and teaching and research about the risks of chemicals and industrial materials to humans and the environment. His interest in stakeholder and risk communication often combines both management and toxicology. His recent research involves risks in government contracting methods, use of naturally occurring asbestos in roadway materials, creosote and other wood preservation chemicals in the marine environment, and toxicity and biodegradation of oil and dispersed oil in Alaskan marine environments.

### **Reddy, Christopher**

#### **Woods Hole Oceanographic Institution**

Christopher Reddy is an associate scientist (with tenure) at the Woods Hole Oceanographic Institution (WHOI) in Woods Hole, MA, and principally investigating marine pollution. He is also the director of the Coastal Ocean Institute where he leads WHOI's overall efforts to catalyze new ideas in coastal science and communicate them to other scientists as well as the lay public, media, and policymakers. He has published over 90 peer-reviewed scientific journal articles and several book chapters on the chemistry of oil and how it interacts with the natural environment and related subjects. Chris has studied or currently studying the aftermaths of oil spills that occurred in 1969, 1974, 1996, 2003, and two in 2007 as well as natural oil seeps off the coast of Santa Barbara, CA and Gulf of Mexico, and more recently the Deepwater Horizon oil spill. Chris received his B.S. in Chemistry from Rhode Island College and Ph.D. in Chemical Oceanography from the University of Rhode Island.

### **Roberts, Stephen M.**

#### **University of Florida**

Dr. Stephen M. Roberts is Professor at the University of Florida with joint appointments in the College of Veterinary Medicine, College of Medicine, and College of Public Health and Health Professions. He also serves as Director of the Center for Environmental & Human Toxicology at the University of Florida. Dr. Roberts received a B.S. in Pharmacy from Oregon State University and a Ph.D. from the University of Utah College of Medicine. After a postdoctoral fellowship at SUNY Buffalo (1977 – 1980), he served on the faculties of the University of Cincinnati College of Pharmacy (1980-1985) and the College of Medicine at the University of Arkansas for Medical Sciences (1986-1989). Dr. Roberts has been a faculty member at the University of Florida since 1989. His research addresses mechanisms of toxicity, particularly involving the liver and immune system. Dr. Roberts also has an active research program in toxicokinetics, especially involving bioavailability of environmental toxicants, as well as approaches to evaluation of potential toxicity of nanomaterials. He serves as an advisor to regulatory agencies on topics related to risk assessment.

### **Roffer, Mitchell**

#### **ROFFS**

Dr. Mitchell received his Ph.D. from the University of Miami Rosenstiel School for Marine and Atmospheric Science in Biological Oceanography with an emphasis in fisheries oceanography. He is President of Roffer's Ocean Fishing Forecasting Service, Inc ([www.roffs.com](http://www.roffs.com)) which provides a variety of scientific consulting services to the fishing industry (commercial and recreational), oil and gas industry (ship routing and environmental monitoring), as well as, Federal and State governments. Roffer's Ocean Fishing Forecasting Service, Inc conducts scientific research and has been funded by NASA the last six years. He is currently on the Board of Directors of Southeast Coastal Ocean Observing Regional Association and on the Products and Services Committee of Gulf of Mexico Coastal Observing System



## Oil Spill Research Strategy Review Candidates

### Rose, Adam

Pennsylvania State University

Dr. Adam Rose is Professor in the Department of Geography at The Pennsylvania State University, where he previously served as Professor and Head of the Department of Energy, Environmental, and Mineral Economics. Before joining Penn State, he served as Professor and Chairman of the Department of Mineral Resource Economics at West Virginia University, Assistant Professor in the Department of Economics at the University of California-Riverside, and Senior Council Economist for the New York State Council of Economic Advisers. He holds a B.A. degree in economics from the University of Utah, and M.A. and Ph.D. degrees in Economics from Cornell University. Dr. Rose's major areas of research are energy and environmental economics, regional science, human dimensions of natural and man-made hazards, and applied general equilibrium analysis. Recent sponsors of his research include the National Science Foundation, U.S. Environmental Protection Agency, Department of Energy, Department of Interior, Pennsylvania Department of Environmental Protection, Center for Clean Air Policy, and Center for Energy and Economic Development. Dr. Rose is the author or co-author of several books and over 50 refereed articles in major academic journals. He serves on the editorial boards of the Journal of Regional Science, Resource and Energy Economics, Pacific and Asian Journal of Energy, Energy Policy, and Resource Policy. He has served on expert panels of the National Academy of Sciences, National Science Foundation, U.S. Department of Interior, and Earthquake Engineering Research Institute. He also has served as the American Economic Association Representative to the American Association for the Advancement of Science. Dr. Rose is also the recipient of a Woodrow Wilson Fellowship and the American Planning Association's Outstanding Program Planning Honor Award.

### Sanders, James

Skidaway Institute of Oceanography

Dr. James Sanders is Director of the Skidaway Institute of Oceanography, a campus of the University System of Georgia. He received his B.S. from Duke University in Zoology and his Ph.D. from the University of North Carolina in Marine Sciences, then was a postdoctoral investigator at Woods Hole Oceanographic Institution. Prior to his arrival in Savannah in 2001, Dr. Sanders was on the faculty and served as Director of the Academy of Natural Sciences' Estuarine Research Center in Maryland from 1981 to 1999, then was Chairman of the Department of Ocean, Earth and Atmospheric Sciences at Old Dominion University in Virginia. Dr. Sanders is known for his interests within the area of nutrient and trace element biogeochemistry: how trace elements are transported through coastal zones, transformed by chemical and biological reactions during transport, and how they can impact aquatic ecosystems. He serves as a consultant to federal and state science agencies and industrial groups in the U.S. and Europe. He is a member of numerous scientific societies, is President of the National Association of Marine Laboratories and a Trustee of the Consortium for Ocean Leadership. He is the author of over 75 scientific publications.

### Short, Jeffrey

Oceana, Inc.

Dr. Short served as the coordinating chemist for the federal and state governments for the restoration phase of the 1989 Exxon Valdez oil spill while employed as a supervisory research chemist at NOAA Fisheries. He holds an MS in physical chemistry from the University of California at Santa Cruz and a PhD in fisheries biology from University of Alaska Fairbanks. He has published extensively on the fate and effects of the oil spilled from the T/V Exxon Valdez. He is currently on the scientific advisory committee of the Alaska Sea Life Center, and is a member of the American Chemical Society and the American Fisheries Society. His current position is Pacific Science Director for Oceana, a non-profit marine conservation organization.

### Spaulding, Malcolm

University of Rhode Island

Dr. Malcolm L. Spaulding is Professor of Ocean Engineering at the University of Rhode Island (URI), Narragansett, RI. He received his BS and PhD degrees in Mechanical Engineering and Applied Mechanics from URI in 1969 and 1972, respectively and an MS degree in Mechanical Engineering from the Massachusetts Institute of Technology, Cambridge, MA in 1970. Dr. Spaulding has been a faculty member in Ocean Engineering at URI since 1973 (Assistant Professor, 1973, Associate Professor, 1977 and Professor, 1983) and served as chairman of the Ocean Engineering department from 1992-2002 and as Acting Chair 1991-1992 and 2006-2007. Dr. Spaulding is an internationally recognized expert in marine environmental modeling with a primary focus in the areas oil spill transport and fate, pollutant transport and fate, hydrodynamics and the development of integrated model and data information systems. He recently led the formation of the Naval Undersea Warfare Center (NUWC) supported Center of Excellence in Undersea Technology (COEUT). He has led the development of several of the most widely used oil spill transport and fate, hydrodynamic, and water quality models and integrated data and information management systems. He founded Applied Science Associates Inc. ([www.asascience.com](http://www.asascience.com)), one of the leading providers of oil spill transport, fate, and impact models in the world. He is widely published in the field of marine environmental and oil spill modeling. Dr. Spaulding served on the National Research Council (NRC) Marine Board and numerous technical panels over the past two decades. He chaired the committee on Spills of Non floating Oils: Risk and Response. He has worked extensively on the application of spill models to forecast and hindcast most of the major oil spills that have occurred including: IXTOC, Argo Merchant, Baer, Exxon Valdez, Prestige, and Persian Gulf to mention a few.

### Springman, Kathrine

Portland State University

Kathrine Springman is currently an Associate Professor at Portland State University in the Chemistry Dept. she holds a Ph. D in Toxicology from Texas A&M University. Dr. Springman has taken an interdisciplinary approach to studying the toxicological effects of hydrocarbons on marine life. Dr. Springman has conducted important research on the long-term ecological effects of the Exxon Valdez oil spill. She also has experience with Superfund remediation research.



## Oil Spill Research Strategy Review Candidates

### Suidan, Makram

University of Cincinnati

Makram T. Suidan is currently the Herman Schneider Professor of Environmental Engineering at the University of Cincinnati. He holds a B.S. in Civil Engineering from the American University of Beirut, and an M.S and PhD in Environmental Engineering from the University of Illinois Urbana-Champaign. His specific areas of expertise are, Oil spill bioremediation, Oil sorption with agricultural wastes, Biodiesel and diesel bioremediation, Bioremediation of Gasoline Oxygenates, Biodegradation of trace substances including pharmaceuticals and endocrine disrupting chemicals, Membrane bioreactor technology for the treatment of contaminated groundwater and wastewater, Treatment of munitions wastewater, Mathematical modeling of treatment processes. His Nominees Sources of Recent Grants and/or Contracts include U.S. EPA and the U.S. Army Construction Engineering Research Laboratory.

### Talaska, Glenn

University of Cincinnati College of Medicine

Glenn Talaska is Professor of Environmental Health at the University of Cincinnati College of Medicine. Dr. Talaska's research program is focused on the development and validation of biomarkers of workplace and environmental exposure to carcinogens as well as their mechanisms of action. He has published over 100 articles in the scientific press on these topics. Dr. Talaska is the Vice Chair of the American Conference of Governmental Industrial Hygienists (ACGIH) Biological Exposure Indices (BEI) Committee and Secretary of the Scientific Subcommittee on Occupational Toxicology (SCOT) of the International Congress of Occupational Health (SCOT). He serves on the editorial boards of the Journal of Occupational and Environmental Health, the International Archives of Occupational and Environmental Health, Polycyclic Aromatic Compounds and the Journal of Public Health.

### Terrill, Eric

Scripps Institution of Oceanography, University of California San Diego

With a B.S. in Engineering from the University of California, San Diego and a Ph.D. in Physical Oceanography from the Scripps Institution of Oceanography, Eric Terrill is Director of the Coastal Observing Research & Development (CORD) Center at the Scripps Institution of Oceanography. Under Terrill's direction, the CORD Center focuses their science and technology, research and development efforts on solutions to problems in the coastal environment. Terrill's research focuses on coastal circulation and the merger of ocean sciences with technology development, including the development of regional coastal observing sensor networks used for science and operational decision-making. He leads funded research programs in coastal circulation, water quality, acoustical oceanography, naval hydromechanics, and air sea interaction processes, particularly surface waves and wave breaking (including those within hurricanes). Sensor development, and the use of various observing platforms, (including autonomous platforms, remote sensing, ocean moorings, and vessel operations) are integral to his research. Terrill also serves as a council member on the Joint Institute for Marine Observations (JIMO) Director's Advisory Council of Fellows and as Technical Director of Operations for the Southern California Coastal Ocean Observing System (SCCOOS), which brings together coastal observations in the Southern California Bight to provide information necessary to address issues in climate change, ecosystem preservation and management, coastal water quality, maritime operations, coastal hazards and national security. SCCOOS works interactively with local, state and federal agencies, resource managers, industry, policy makers, educators, scientists and the general public to provide data, models and products that advance our understanding of the current and future state of our coastal and global environment.

### Tjeerdema, Ronald

University of California

Professor Tjeerdema is Professor and Chair of the Department of Environmental Toxicology at the University of California, Davis. He holds two B.S. degrees in Natural Resource Planning & Interpretation, Wildlife Management respectively from Humboldt State University, an M.A. in Pharmacology & Toxicology from the University of California, Santa Barbara, and a Ph.D. in Pharmacology & Toxicology, from the University of California, Davis. He possesses nearly 25 years of experience directing research on the environmental fate and toxic actions of crude oil, oil dispersants and dispersed oil in marine and freshwater systems and organisms. Professor Tjeerdema has also served for many years as an advisor to the California Office of Spill Prevention & Response, and recently served on the NOAA-CRRC Deepwater Horizon Dispersant Use Panel to provide input on the continued use of dispersants for the Deepwater Horizon well blowout.

## Oil Spill Research Strategy Review Candidates

### Trapido, Edward

#### Louisiana State University

Edward J Trapido, ScD, FACE, is Professor and Wendell Gauthier Chair for Cancer Epidemiology at the LSUHSC School of Public Health, and the Deputy Director for Population Science in the Stanley S. Scott Cancer Center (SSSCC). He is also the Associate Dean for Research at LSU School of Public Health, and Senior Liaison to the Dean of the LSU School of Medicine. He is responsible for coordinating all of the research on the Deepwater Horizon Gulf Oil Spill, at the LSU Health Sciences Center, which includes the Schools of Medicine, Public Health, Nursing, Dentistry, Allied Health Professions, and Graduate Studies. He also directs the Louisiana Cancer Research Consortium (LCRC) Population Sciences research program, a joint initiative involving the SSSCC, the Tulane Cancer Center, and Xavier University. Prior to joining the faculty of LSUHSC, he was Professor and Vice Chair for the Department of Epidemiology and Public Health at the University Of Miami School Of Medicine. This included working with the University of Miami Rosenstil School of Marine and Atmospheric Science, in which he and colleagues developed an integrated approach to stabilize and grow the fishing resources while decreasing transmission of infectious diseases such as HIV/AIDS and M. tuberculosis in two fishing areas in the Dominican Republic. His leadership experience includes appointments at the NCI as Deputy Director for International Cancer Control in the Office of International Affairs and as Associate Director of the Epidemiology and Genetics Research Program within the Division of Cancer Control and Population Sciences. In addition, he has co-chaired of the Trans-NIH Tobacco and Nicotine Research Interest Group and served as Senior Advisor to the Director of the International Agency for Research, in Lyon, France. Dr. Trapido was also the NCI representative to the World Trade Center Late Emergent Diseases Working Group. Dr. Trapido currently serves on the Board of Directors of the American College of Epidemiology, is an Associate Editor of the Annals of Epidemiology, is a consultant to the International Prevention Research Institute in Lyon, France, the 4th International Cancer Control Congress, and has served on several ad-hoc NIH study sections in the past year. He will also be leading the evaluation of the UN International Atomic Energy Agency's "Program of Action" for Cancer, which has developed and implemented education, prevention, screening, and treatment programs in Nicaragua, Yemen, Viet Nam, Tanzania, Sri Lanka, and Albania. Before rejoining the NCI in 2002, Dr. Trapido was Professor and Vice Chair of the Department of Epidemiology and Public Health, University of Miami School of Medicine and directed the M.P.H. and Ph.D. programs. He also was Associate Director for Cancer Prevention and Control at the Sylvester Comprehensive Cancer Center. He directed several major cancer control research and education programs, including the Cancer Information Service, the Florida Cancer Data System, the Florida Comprehensive Cancer Control Initiative, the Early Breast Cancer Detection Program, and Redes En Acción, which focuses on cancer prevention and control among Hispanics. He also was Director of the Tobacco Research and Evaluation Coordinating Center and was a consultant to the Florida and Minnesota Tobacco Programs, which have received nationwide acclaim for reducing teenage smoking. Dr. Trapido's disciplinary expertise is in epidemiology, cancer prevention and control, tobacco prevention and control, working with developing countries to build sustainable health and economic programs, HIV/AIDS epidemiology and interventions, and on substance abuse.

### Tuler, Seth

#### Social and Environmental Research Institute

Seth Tuler is a Research Fellow at the Social and Environmental Research Institute and Adjunct Associate Professor in the International and Global Studies Division, Worcester Polytechnic Institute. His research interests have been concerned with public participation, risk communication, long-term stewardship of contaminated sites, and developing tools to characterize human impacts and vulnerabilities to risk events. Recent articles have addressed social impacts and vulnerabilities in oil spill contingency planning and fishery management regulations and variations in public preferences for decision making procedures for risk and natural resource management. Seth received a B.A. in Mathematics (1984) from the University of Chicago, an M.S. in Technology and Policy (1987) from the interdisciplinary Technology and Policy Program of the Massachusetts Institute of Technology, and a Ph.D. from the Environmental Science and Policy Program, Clark University, Worcester, MA in 1996. He seeks to apply insights emerging from research to practical applications in a wide range of policy arenas, including public health, clean-up of contaminated sites, marine oil spill response, and marine fisheries management. His work on risk communication has focused on the ways that trust/distrust and perceptions of uncertainty play a role in formation of risk attitudes and behaviors. His work on risk communication and public participation intersect with his investigations of the ways that participation can inform the design and implementation of effective risk communication efforts by making them more responsive to the concerns and understandings of target audiences. During the winter of 2008/09 he conducted research as a Fulbright Scholar in Thailand on the communication of public health risks from petrochemical facilities. In an effort to apply the insights from research, Seth has worked with communities addressing public health risks from US nuclear weapons production and related facilities since 1996. First with the Childhood Cancer Research Institute and now with the Social and Environmental Research Institute he has helped organize and facilitate environmental health education, training, and public participation so that residents can be more effective participants in government-sponsored clean-up and health assessments. Because of his work with communities, he was asked to advise the National Cancer Institute in its efforts to inform people about health risks from iodine-131 nuclear weapons testing fallout. He was a member of federal Advisory Committee on Energy-Related Epidemiologic Research and chaired its Subcommittee for Community Affairs for 2 years. He served on the National Academy of Science's Committee on Transportation of Spent Nuclear Fuel and High Level Radioactive Waste.

### Van Veld, Peter

#### College of William and Mary

Peter A. Van Veld is an Associate Professor at the College of William and Mary, Virginia Institute of Marine Science. He holds a B.S. in Biology from the University of North Carolina, an M.S. in Marine Science from the College of William and Mary, and a Ph.D., Institute of Ecology, University of Georgia. Dr Van Veld has over 30 years experience in work related to fate and effects of polycyclic aromatic hydrocarbons and other organic contaminants in marine organisms. He regularly teaches graduate level courses in environmental chemistry and aquatic toxicology. He is a regular reviewer for the Exxon Valdez Oil Spill Trustee Council, the North Pacific Research Board. He was hired as consultant by Exxon Corporation following the Exxon Valdez spill.

## Oil Spill Research Strategy Review Candidates

### Weber, E. Scott

University of California-Davis

Dr. Weber has an extensive educational background and has spent a considerable amount of his career in academia representing aquaculture and epidemiology. Presently Dr. Scott Weber serves as the vice-chair of the Aquatic Veterinary Medicine Committee of the American Veterinary Medical Association (AVMA). He recently served on the AVMA Antimicrobial Use task force where he provided expert opinion in regards to the use of antimicrobials in aquaculture. He holds a B.S. in Zoology and Marine Biology from the University of California Davis, a M.Sc. Aquatic Veterinary Science/Pathobiology from the Institute of Aquaculture, University of Stirling; Stirling, Scotland and a VMD from the University of Pennsylvania School of Veterinary Medicine.

### Webler, Thomas

SERI

Thomas Webler is a Senior Researcher with the Social and Environmental Research Institute in Greenfield, Massachusetts, USA. He specializes in the science of bringing local and expert knowledge together in collaborative, democratic ways to produce innovative solutions to problems of collective action in the areas of environmental and risk decision-making. He has a Ph.D. in interdisciplinary studies from Clark University (Worcester, Massachusetts, USA) where he specialized in the social dimensions of risk analysis, technology assessment, critical social theory, and public participation. From 1992-1994 he did post-doctoral research on public participation in waste planning at the Swiss Federal Institute of Technology in Zurich, Switzerland. Upon returning to the United States he became the consultant to a U.S. National Research Council committee studying risk communication. That committee published a report titled: Understanding Risk: Informing decisions in a democratic society. He co-authored a book on advances in social science theory in the field of risk studies. The book is titled: Risk, Uncertainty, and Rational Action (London: Earthscan 2001). In 2006 he was a Fellow of the Breuninger Foundation at the University of Stuttgart on the topic of environmental collaboration. In 2007-2008 he had a Fulbright teaching fellowship to India to teach the social dimensions of biodiversity conservation. Together with his colleague, Seth Tuler, he recently edited special issues of Policy Studies Journal and Human Ecology Review on public participation in environmental decision making. His present research grants focus on empowering community involvement in superfund clean-ups and assessing the vulnerability of fisheries communities to regulatory change.

### Weis, Judith

Rutgers University

Dr. Judith Weis is a Professor, Department of Biological Sciences, Rutgers University, Newark NJ. She previously served as Associate Dean for Academic Affairs at the University. She also has served as American Association for the Advancement of Science (AAAS) Congressional Science Fellow with the Senate Environment and Public Works Committee, and Program Director at the National Science Foundation. She has been a visiting scientist at the U.S. Environmental Protection Agency both at the research lab at Gulf Breeze FL and in the Office of Water. She received her B.S. in Zoology from Cornell University and an M.S. and Ph.D. in Biology from New York University. Dr. Weis' research has focused on estuarine ecology and ecotoxicology. She has published about 200 refereed papers, focusing mainly on stresses in the estuarine environment and their effects on organisms, populations and communities. Particular areas of focus have been effects of metal contaminants on growth, development, behavior, and trophic interactions; development of tolerance to contaminants in populations living in contaminated areas; effects of parasites on behavior and ecology of fish; interactions of invasive and native crab species; effects of invasive marsh plants on estuarine ecology and on fate of metal contaminants. Much of her research has been focused on estuaries in the New York/New Jersey Harbor area. A book entitled "Salt Marshes: A Natural and Unnatural History" will be published in 2009. Dr. Weis has served on numerous advisory committees and has held leadership positions: Boards of Directors of the Society of Environmental Toxicology and Chemistry (SETAC), Association for Women in Science (AWIS) and the American Institute of Biological Sciences (AIBS); Chair of the Biology Section of American Association for the Advancement of Science (AAAS) in 2000; and President of AIBS in 2001. She is a fellow of the American Association for the Advancement of Science (AAAS). She has served on several advisory committees for the U.S. Environmental Protection Agency (EPA): Scientific and Technical Achievement Awards (STAA) and the initial review committee for the Report on the Environment (ROE) for the EPA Science Advisory Board, and the Endocrine Disruptors Screening and Testing Advisory Committee – EDSTAC). She has been a member of the Marine Board of the National Research Council, and currently serves on the National Sea Grant Advisory Board of NOAA. Dr. Weis has previously been on the Editorial Boards of Transactions of the American Fisheries Society and Bulletin of Environmental Contamination and Toxicology (BECT) and was Associate Editor of BECT. She is currently on the Editorial Board of BioScience and Journal of Marine Biology. Dr. Weis' sources of recent grant support include: U.S. Geological Survey - Water Resources Research Program; National Science Foundation - Division of Environmental Biology; NOAA, and Meadowlands Environmental Research Institute.

## Oil Spill Research Strategy Review Candidates

### White, LuAnn

#### Tulane University

LuAnn E. White, PhD, DABT, is the Director of the Tulane Center for Applied Environmental Health (CAEPH) and professor in the Department of Environmental Health at Tulane School of Public Health and Tropical Medicine. She is a Diplomate of the American Board of Toxicology. She received a BS in Chemistry from St. Mary's Dominical College and a PhD in Pharmacology and Toxicology from Tulane School of Medicine. Dr. White directs Academic Partners of Excellence for the Environmental Public Health Tracking Network funded by the Center for Disease Control and Prevention and the New Orleans Study Center of the National Children's Study funded by the National Institutes of Health. Dr. White serves as the toxicology consultant to the Louisiana Department of Health and Hospitals to assess the impact of hazardous materials on human health; she is currently working on the Gulf Oil Spill. Dr. White work on the Gulf Oil Spill includes providing toxicological assessment of the dispersants, developing the seafood monitoring program, exposure assessment based on air monitoring. Research projects include: the Head-off Environmental Asthma in Louisiana (HEAL) which examined the post-Katrina effects of molds on children with asthma; childhood lead poisoning in New Orleans including the impact of the post-Katrina demolition of housing on the reduction of childhood lead poisoning; methods for linking air monitoring data and health outcome data for respiratory and cardiovascular diseases. National Committees: ATSDR Board of Scientific Counselors (1999-2002); the National Injury Prevention and Control Initial Review Group for CDC (2008-2012).

### Willey, Ronald

#### Northeastern University

Dr. Willey is a Professor of Chemical Engineering at Northeastern University. He specializes in case histories related to large scale chemical plant accidents and has a broad range of practical experience in chemical engineering including working with high pressure systems and the mitigation of toxic agents. He is a member of the Board of Registration of Engineers and Land Surveyors in the Commonwealth of Massachusetts. He is also a Co-Editor of Process Safety Progress for American Institute of Chemical Engineers and a fellow and life member of American Institute Chemical Engineers. He holds a B.S. in Chemical Engineering from University of New Hampshire and a Ph.D. in Chemical Engineering from the University of Massachusetts.

### Word, Jack

#### NewFields NW

Dr. Jack Word is currently a partner and the Director of Environmental Research at Newfields, an environmental consulting firm. He holds a B.S., Zoology from California State University, an M.A. in Biology from California State University, and a PhD in Fisheries from the University of Washington. He has over 35 years of experience in aquatic toxicology research and is an internationally recognized expert toxicologist that has provided advice on development of testing protocols, petroleum-related issues, dredge material and sediment evaluations, benthic community interpretation and studies, sea surface microlayer sampling and testing, and bio remediation. He is the developer of innovative bioremediation technology, MycoRemediation. Over the past 3 years he has been directing a joint project that is supporting research being conducted by Newfields and the University of Alaska - Fairbanks. The research focuses on the effects and biodegradation of chemically and physically dispersed petroleum using indigenous Arctic test species and microbes. Protocols and procedures have been developed and tests have been conducted to evaluate the effects of these materials under Arctic conditions, in a lab that was modified to accommodate the work. He has served on advisory committees including Puget Sound Water Quality Authority's Research Past member of the Joint Technical Advisory Committee for EPA's Region 10 Puget Sound Estuary Program, and Puget Sound Water Quality Authority Committee. He has served on review boards for the ASTM Sediment Toxicology Methods and the Standard Methods for the examination of waste and wastewater. He provided technical guidance to EPA's Criteria and Standards Division and the American Water Works Association. He is currently a member of advisory committee of Washington's Department of Ecology.

### Young, Thomas M.

#### University of California-Davis

Dr. Thomas Young is a Professor of Civil and Environmental Engineering at the University of California, Davis. He holds a B.S. in Chemical Engineering from Michigan State University, an M.P.P. in Public Policy from the University of California, Berkeley, and a Ph.D. in Environmental Engineering from the University of Michigan. Before joining the faculty at UC Davis, Dr. Young worked for three years in US EPA's Office of Underground Storage Tanks, where he worked closely with several EPA laboratories. Dr. Young's current research centers on physical-chemical processes important in treating contaminated water, groundwater, and soil and controlling the fate and transport of contaminants in the environment. The majority of his research has been in the area of environmental sorption processes and in environmental modeling. Dr. Young has published extensively on the above topics, and has a strong interest in the application of engineering to environmental policy-making. He has received various awards, including the Distinguished Service Award from the Association of Environmental Engineering and Science Professors and a National Science Foundation (NSF) Career Award. Dr. Young is a member of the International Water Association, the American Society of Civil Engineers, American Chemical Society, Association of Environmental Engineering and Science Professors, and the Society of Environmental Toxicology and Chemistry.

## Oil Spill Research Strategy Review Candidates

### Zoeller, R. Thomas

University of Massachusetts

Dr. R. Thomas Zoeller is Professor of Biology at the University of Massachusetts-Amherst. Dr. Zoeller received his Bachelor's degree in Biology at Indiana University-Bloomington, followed by a Master's of Science and Ph.D. degrees at Oregon State University. He pursued postdoctoral studies in molecular endocrinology and neuroendocrinology at the National Institutes of Mental Health and Neurological Disorders and Stroke in Bethesda, MD. His first academic appointment was as Assistant Professor in the Department of Anatomy and Neurobiology, University of Missouri-Columbia School of Medicine. He later joined the Biology Department at the University of Massachusetts-Amherst, becoming appointed as Professor and later as Chairman. Dr. Zoeller has been a member of the Editorial Board of Endocrinology and Environmental Toxicology and Pharmacology. He was a member of the U.S. EPA's Endocrine Disruptors Screening and Testing Advisory Committee (EDSTAC) Screening and Testing Workgroup as well as on the peer review panels for EPA's risk assessment for Perchlorate and PFOA. He also served on the NIH Center for Scientific Review Integrative and Clinical Endocrinology and Reproduction study section. Dr. Zoeller was named "Scientist of the Year - 2002" by the Learning Disabilities Association of America and won the Samuel F. Conti Award for Research Excellence at the University of Massachusetts-Amherst.